

REMARKS

Claims 1, 4-11 and 13-19 and 22 are pending in the present application. Claims 1, 11 and 22 are independent. By this reply, claims 2 and 3 have been cancelled.

The claims have been amended to clarify the invention and to correct informalities. These modifications do not add new matter.

35 U.S.C. § 112, Second Paragraph Rejection

Claim 2 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. This claim is canceled and the rejection is moot. Accordingly, the rejection should be withdrawn.

35 U.S.C. § 103 Rejection

Claims 1, 2, 6-11, 13-16 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Satoshi et al. (EP Patent No. 0851382) and Syeda-Mahmood et al. (U.S. Patent No. 6,621,941). Claims 3-4 and 17-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Satoshi et al., Syeda-Mahmood et al. and Takahashi et al. Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Satoshi et al., Takahashi et al., Syeda-Mahmood et al., further in view of Saitoh (U.S. Patent No. 5,220,621). These rejections, insofar as they pertain to the presently pending claims, are respectfully traversed.

In response to Applicants' previously filed arguments that the leaning mode operation shown in Fig. 6 of Satoshi et al. fails to perform the designating step, the recognizing step, and the first storing step as recited in independent claim 1 (and similarly recited in other independent

claims) to the “scanned document” as claimed, the Examiner disagrees and turns to the learning mode operation of Fig. 24 in Satoshi et al. However, this operation in Satoshi et al. also does not teach or suggest the claimed invention.

In the learning mode operation of Fig. 24, Satoshi (the intra-table title extracting process, page 13, line 23) discloses that “at first large rectangles are extracted (S62), subsequently rectangles comprising a table are extracted (S63) and a rectangle containing management information is selected from the table rectangles (S64). Hereafter character strings are extracted from a selected rectangle (S65).” Further, Satoshi continues to state that “the number of characters in a character string rectangle is counted to extract a character string rectangle corresponding to management information (S69). When the number of characters in the character string rectangle satisfies a predetermined condition, the character rectangle is extracted as management information (S72) thereby terminating the process.”

Thus, up to now, this process in Satoshi is completely done without user intervention. Satoshi further continues to state “If there are a plurality of character string rectangles satisfying the condition, then they are determined to be candidates for the management information. In the example of Fig. 23 three candidates are presented to the user. The user selects one of them by pointing to it using a mouse.” Satoshi continues with “The management information extraction apparatus learns the position of the user-selected management information, and stores the position of the user-selected management information, and stores the position information in the dictionary.”

Comparing this method of Satoshi with Applicants’ method as claimed, there are a number of patentable distinctions. For instance, in Satoshi an extracting/analyzing process on the

whole document is carried out, which delivers possibly a number of candidates from which the user has to select one, and from which the position will be stored for next documents of the same type. In contrast herewith, according to the present invention, no extracting/analyzing process takes place in advance of a user's designation of a point on the scanned document. Instead, the scanned image/document is displayed to the user and the user indicates a point on it. It is only hereafter that the extraction in the bitmap takes place. Further, this extraction process is applied only in the region (box) around the designated point, until a rectangle is identified, from which the position information is stored. As a result, in Applicants' invention, there is no need to perform an advance processing/extracting of a scanned document and only the processing of the scanned document in a limited region (box including the designated point) is performed and not the entire document is analyzed. These features of the present invention are advantageous over the prior art because, e.g., they result in faster processing (the selected region is right away the desirable region) not attainable by Satoshi or others.

That is, comparing Satoshi with Applicants' invention, there are many patentable distinctions, e.g., the way the cell/box containing the title is determined. In Satoshi, the whole structure of the table needs to be mapped out first, and then the user points on a screen to the character string and next the position information of the rectangular cell containing the pointed position is stored; see, e.g., page 7, lines 45-48. Thus, in Satoshi, the entire structure of the whole table has to be mapped out previously. In contrast, according to Applicants' invention, only the box around the pointed position P is searched for and the prior mapping operation for the entire table/document is not needed. Thus, Applicants' invention is simple, effective and user-friendly over the prior systems.

Furthermore, without acquiescing to any of the Examiner's allegations made in rejecting the claims, independent claims 1, 11 and 22 have been amended to recite that the searching for and identifying the box is performed by applying a shape search algorithm over a determined search zone surrounding the point P previously designated by the user. These additional features in combination with the already existing features in each independent claim further render the claims patentable over the applied references.

Accordingly, independent claims 1, 11 and 22 and their dependent claims (due to the dependency) are patentable over the applied references, and the rejections are improper and should be withdrawn.

CONCLUSION

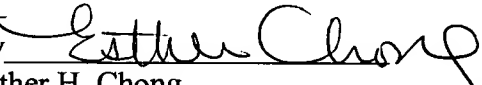
For the foregoing reasons and in view of the above clarifying amendments, Applicants respectfully request the Examiner to reconsider and withdraw all of the objections and rejections of record, and earnestly solicits an early issuance of a Notice of Allowance.

Should there be any outstanding matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Esther H. Chong (Registration No. 40,953) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 
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